



PATENT
Attorney Docket No. A-71138-1/RFT/RMS/RMK
Dorsey File No. 468488-00214

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MAYO et al.

Serial No.: 10/074,679

Filing Date: February 11, 2002

For: *Method for the Generation of Proteins
with New Enzymatic Function*

Examiner: Borin, Michael L.

Art Unit: 1631

CERTIFICATE OF MAILING

I hereby certify that this correspondence, including listed enclosures, is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on March 11, 2004.

Signed: Carey Peralta
Carey Peralta

**INFORMATION DISCLOSURE STATEMENT
AND
STATEMENT OF RELATEDNESS**

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying substitute for form PTO-1449. Copies of these references are enclosed.

With respect to patent applications, the applicants point out their duty under M.P.E.P. §2001.06(b) to disclose relevant patent applications of which they are aware. To this end, the applicants draw the Examiner's attention to the following patent applications:

Serial No.: 10/074,679
Filing Date: February 11, 2002

1. U.S.S.N. 09/714,357, filed November 15, 2000;
2. U.S.S.N. 10/666,311, filed September 18, 2003; and
3. U.S.S.N. 10/665,307, filed September 18, 2003.

None of the foregoing references is believed to disclose the invention as claimed.

Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

While no further fee is believed to be due, if this belief is in error, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2319 (Our Order No. 468488-00214 (A-71138-1/RFT/RMS/RMK)).

Please direct any calls in connection with this application to the undersigned at
(415) 781-1989.

Respectfully submitted,
DORSEY & WHITNEY LLP

Dated: 3/11/04
Dorsey & Whitney LLP
Intellectual Property Department
Four Embarcadero Center, Suite 3400
San Francisco, CA 94111-4187
Telephone: (415) 781-1989
Facsimile: (415) 398-3249

BY: 

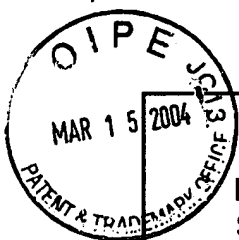
Renee M. Kossiak, Reg. No. 47,717 for
Robin M. Silva, Reg. No. 38,304

Filed under 37 C.F.R. § 1.34(a)

Customer Number: 32940

Attachments:

Form PTO/SB/8A-B, Substitute for Form PTO-1449
92 cited references



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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Art Unit	1631
Examiner Name	Borin, Michael L.
Attorney Docket Number	A-71138-1/RFT/RMS/RMK

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	4,939,666	07-03-1990	Hardman	
	A2	5,241,470	08-31-1993	Lee et al.	
	A3	5,265,030	11-23-1993	Skolnick et al.	
	A4	5,527,681	06-18-1996	Holmes	
	A5	5,878,373	03-02-1999	Cohen et al.	
	A6	6,188,965 B1	02-13-2001	Mayo et al.	
	A7	6,269,312 B1	07-31-2001	Mayo et al.	
	A8	6,403,312 B1	06-11-2002	Dahiyat et al.	
	A9	2001/0032052A1	10-18-2001	Mayo et al.	
	A10	2001/0039480A1	11-08-2001	Mayo et al.	
	A11	2002/0004706A1	01-10-2002	Mayo et al.	
	A12	2002/0048772A1	04-25-2002	Dahiyat et al.	
	A13	2002/0106694A1	08-08-2002	Mayo et al.	
	A14	2003/0049654A1	03-13-2003	Dahiyat et al.	
	A15	2003/0130827A1	07-10-2003	Bentzien et al.	
	A16				
	A17				
	A18				
	A19				

FOREIGN PATENT DOCUMENTS

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	B1	WO 95/22625 A1	08-24-1995	Affymax Technologies N.V.		
	B2	WO 98/32845 A1	07-30-1998	Bioinvent International AB		
	B3	WO 98/47089 A1	10-22-1998	California Institute of Technology		
	B4	WO 00/23564 A2	04-27-2000	Xencor Inc.		
	B5	WO 00/68396 A2, A3	11-16-2000	Xencor Inc.		
	B6	WO 01/59066 A2, A3	08-16-2001	Xencor Inc.		
	B7	WO 03/014325 A2	02-20-2003	Xencor		
	B8					
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Sheet 2 of 5

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	C1	Benson et al., "Rational design of nascent metalloenzymes", Proc Natl Acad Sci USA, June 6, 2000, 97(12):6292-6297.	
	C2	Bolon et al., "Enzyme-like proteins by computational design", Proc Natl Acad Sci USA, December 4, 2001, 98(25):14274-14279.	
	C3	Borman, "Proteins to Order," Chemical and Engineering Newsletter, C&EN, October 6, 1997, pgs.9-10.	
	C4	Bowie, J.U., et al., "A Method to Identify Protein Sequences That Fold into a Known Three-Dimensional Structure", Science, 1991, 253:164-170.	
	C5	Bowie, J.U., et al., "Deciphering the Message in Protein Sequences: Tolerance to Amino Acid Substitutions", Science, March 1990, 247:1306-1310.	
	C6	Brenner and Berry, A., et al., "A quantitative methodology for the de novo design of proteins", Protein Sci., 1994, 3:1871-1882.	
	C7	Brooks et al., "CHARMM: A Program for Macromolecular Energy, Minimization, and Dynamics Calculations," J. of Computational Chemistry, 1983, 4(2):187-217.	
	C8	Connolly, M.L., "Solvent-Accessible Surfaces of Proteins and Nucleic Acids", Science, August 19, 1983, 221(4612):709-713.	
	C9	Corey et al., "On the failure of de novo-designed peptides as biocatalysts", Proc Natl Acad Sci USA, October 1996, 93:11428-11434.	
	C10	Cornell et al., "A Second Generation Force Field for the Simulation of Proteins, Nucleic Acids, and Organic Molecules", J. Am. Chem. Soc., 1995, 117:5179-5197.	
	C11	Dahiyat et al., "De Novo Protein Design: Fully Automated Sequence Selection", Science, 1997, 278:82-87.	
	C12	Dahiyat et al., "Probing the Role of Specificity in Protein Design", Caltech Biology Annual Report, 1996, pp160-161.	
	C13	Dahiyat et al., "Protein Design Automation", Protein Science, 1996, 5:895-903.	
	C14	Dahiyat et al., "Protein design automation", Caltech Biology Annual Report, 1995, p172.	
	C15	Dahiyat et al., "Protein Design Automation," Meeting Abstract, Protein Science, 1995, vol. 4, Suppl. 2, p83.	
	C16	Dahiyat et al., "Protein Design Automation," Poster Sessions, Protein Science, 1996, vol.5, Suppl. 1, pp22-23.	
	C17	Dahiyat, B.I., et al., "Automated design of the surface positions of protein helices", Protein Science, 1997, 6:1333-1337.	
	C18	Dahiyat, B.I., et al., "First Fully Automatic Design of a Protein Achieved by Caltech scientists", news press release, Oct. 1997.	
	C19	Dalal, S., et al., "Protein alchemy: Changing β -sheet into α -helix", Nature Struc. Biol., July 1997, 4(7):548-552.	
	C20	DeGrado, W., "Proteins from Scratch", Science, 1997, 278:80-81.	
	C21	Desjarlais et al., "New strategies in protein design", Current Opinion in Biotechnology, 1995, pp460-466.	

Examiner Signature	Date Considered
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	C22	Desjarlais, J.R., et al., "De novo design of the hydrophobic cores of proteins", Protein Science, 1995, 4:2006-2018.	
	C23	Desmet et al., "Theoretical and Algorithmical Optimization of the Dead-End Elimination Theorem", Proceedings of the Pacific Symposium on Biocomputing '97, 1997, pp122-133.	
	C24	Desmet, J., et al., "The 'Dead End Elimination' Theorem: A New Approach to the Side-Chain Packing Protein", from "The Protein Folding Problem and Tertiary Structure Prediction", 1994, Ch.10:1-49.	
	C25	Desmet, J., et al., "The dead-end elimination theorem and its use in protein side-chain positioning", Nature, April 9, 1992, 356:539-542.	
	C26	Dunbrack Jr., R.L., et al., "Conformational analysis of the backbone-dependent rotamer preferences of protein sidechains", Struc. Biol., May 1994, 1(5):334-340.	
	C27	Eisenberg, D., et al., "Solvation energy in protein folding and binding", Nature, Jan. 1986, 319:199-203.	
	C28	Fechteler T, et al., "Prediction of Protein Three-dimensional Structures in Insertion and Deletion Regions: A Procedure for Searching Data Bases of Representative Protein Fragments Using Geometric Scoring Criteria", J Mol Biol., Oct 13, 1995, 253:114-31.	
	C29	Gallop et al., "Applications of Combinatorial Technologies to Drug Discovery. 1. Background and Peptide Combinatorial Libraries", Journal of Medicinal Chemistry, April 29, 1994, 37(9):1233-1251.	
	C30	Goldstein, R.F., "Efficient Rotamer Elimination Applied to Protein Side-Chains and Related Spin Glasses", Biophys. Jour., May 1994, 66:1335-1340.	
	C31	Gordon et al. "Energy functions for protein design", Curr. Opinion in Struct. Biol., 1999, 9:509-513.	
	C32	Harbury et al., "High-Resolution Protein Design with Backbone Freedom", Science, 282:1462-1467 (1998).	
	C33	Harbury et al., "Repacking protein cores with backbone freedom: Structure prediction for coiled coils", Proc. Natl. Acad. Sci. USA, 1995, 92:8408-8412.	
	C34	Hellinga, H.W., "Rational protein design: Combining theory and experiment", Proc. Natl. Acad. Sci. USA, Sep. 1997, 94:10015-10017.	
	C35	Hellinga, H.W., et al., "Construction of New Ligand Binding Site in Proteins of Known Structure I. Computer-aided Modeling of Sites with Pre-defined Geometry", J. Mol. Biol., 1991, 222:763-785.	
	C36	Hellinga, H.W., et al., "Optimal sequence selection in proteins of known structure by simulated evolution", Proc. Natl. Acad. Sci. USA, Jun. 1994, 91:5803-5807..	
	C37	Holmes, "First-ever designer protein fits like a glove," New Scientist, Oct. 11, 1997, IPC Magazines Limited, p8.	
	C38	Hurley et al., "Design and Structural Analysis of Alternative Hydrophobic Core Packing Arrangements in Bacteriophage T4 Lysozyme", J. Mol. Biol., 1992, 224:1143-1159.	
	C39	Jones, D.T., "De novo protein design using pairwise potentials and a genetic algorithm", Protein Science, 1994, 3:567-574.	
	C40	Koehl et al., "De Novo Protein Design. I. In Search of Stability and Specificity," J. Mol. Biol., 1999, 293:1161-1181.	
	C41	Kono et al., "Energy Minimization Method Using Automata Network for Sequence and Side-Chain Conformation Prediction from Given Backbone Geometry", Proteins: Structure, Function, and Genetics, 1994, 19:244-255.	
	C42	Kortemme et al., "Design of a 20-Amino Acid, Three-Stranded β -Sheet Protein", 1998, Science, 281:253-256.	

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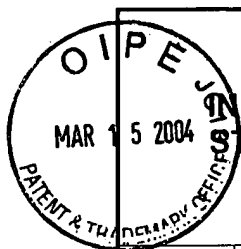
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	C43	Lam, Kit S., "Application of combinatorial library methods in cancer research and drug discovery", Anti-Cancer Drug Design, 1997, 12:145-167.	
	C44	Lasters et al., "Enhanced dead-end elimination in the search for the global minimum energy conformation of a collection of protein side chains", 1995, Protein Engineering, 8(8): 815-822.	
	C45	Lasters, I., et al., "Dead-End Based Modeling Tools to Explore the Sequence Space That is Compatible with a Given Scaffold", Jour. of Protein Chem., July 1997, 16(5):449-452.	
	C46	Lazar et al., "De novo design of the hydrophobic core of ubiquitin", Protein Science, 1997, 6:1167-1178.	
	C47	Lee et al., "Accurate prediction of the stability and activity effects of site-directed mutagenesis on a protein core," Nature, 1991, 352:448-451.	
	C48	Lim et al., "The crystal structure of a mutant protein with altered but improved hydrophobic core packing", Proc Natl Acad Sci U S A, Jan 1994, 91(1):423-427.	
	C49	Malakauskas, S.M. and Mayo, S.L., "Design, structure and stability of a hyperthermophilic protein variant", Nat Struct Biol., Jun 1998, 5(6):470-475.	
	C50	Mayo et al., "DREIDING: A Generic Force Field for Molecular Simulations", J. Phys. Chem., 1990, 94:8897-8909.	
	C51	Minor Jr., D.L., "Measurement of the β -sheet-forming propensities of amino acids", Nature, Feb. 1994, 367:660-663.	
	C52	Munoz, V., et al., "Analysis of the effect of local interactions on protein stability", Folding & Design, Apr. 1996, 1(3):167-178.	
	C53	Munoz, V., et al., "Helix design, prediction and stability", Curr. Opin. in Biotech., Aug. 1995, 6:382-386.	
	C54	Munoz, V., et al., "Intrinsic Secondary Structure Propensities of the Amino Acids, Using Statistical f -? Matrices: Comparison with Experimental Scales", Proteins, 1994, 20:301-311.	
	C55	Pabo, C., "Designing proteins and peptides", Nature, Jan. 1983, 301:200.	
	C56	Padmanabhan, S., et al., "Relative helix-forming tendencies of nonpolar amino acids", Nature, Mar. 1990, 344:268-270.	
	C57	Pinto et al., "Construction of a catalytically active iron superoxide dismutase by rational protein design", Proc Natl Acad Sci USA, May 1997, 94:5562-5567.	
	C58	Ponder, J.W., et al., "Use of Packing Criteria in the Enumeration of Allowed Sequences for Different Structural Classes", release by Acad. Press Inc. (London) Ltd., 1987, pp.775-791.	
	C59	Rappé et al., "Charge Equilibration for Molecular Dynamics Simulations", J. Phys. Chem., 1991, 95:3358-3363.	
	C60	Regan, L., "Helix is a helix is a helix?", Proc. Natl. Acad. Sci. USA, Apr. 1997, 94:2796-2797.	
	C61	Smith, C.K., et al., "Guidelines for Protein Design: The Energetics of β Sheet Side Chain Interactions", Science, Nov. 1995, 270:980-982.	
	C62	Stickley et al., "Hydrogen Bonding in Globular Proteins", Journal of Molecular Biology, 1992, 226:1143-1159.	
	C63	Sun, S., et al., "Designing amino acid sequences to fold with good hydrophobic cores", Protein Eng., 1995, 8(12):1205-1213.	

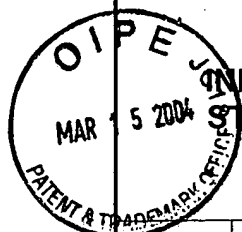
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	C64	Tuffery et al., "A New Approach to the Rapid Determination of Protein Side Chain Conformations", J. of Biomolecular Struct. & Dynamics, 1991, 8(6):1267-1289.	
	C65	van Gunsteren et al., "Prediction of the Activity and Stability Effects of Site-directed Mutagenesis on a Protein Core", J. Mol. Biol., 1992, 227:389-395.	
	C66	Villegas et al., "Stabilization of proteins by rational design of a-helix stability using helix/coil transition theory", Folding & Design, 1995, 1(1):29-34.	
	C67	Wallace AC, et al., "Derivation of 3D coordinate templates for searching structural databases: Application to Ser-His-Asp catalytic triads in the serine proteinases and lipases", Protein Sci., Jun 1996, 5(6):1001-13.	
	C68	Wesson et al., "Atomic solvation parameters applied to molecular dynamics of proteins in solution", Protein Science, 1992, 1:227-235.	
	C69	Wilson et al., "Computational Method for the Design of Enzymes with Altered Substrate Specificity", J. Mol. Biol., 1991, 220:495-506.	
	C70	Wodak, S.J., et al., "Analytical approximation to the accessible surface area of proteins", Proc. Natl. Acad. Sci. USA, Apr. 1980, 77(4):1736-1740.	
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